

ABSTRACT

A measuring system includes a measuring device, another device and a device configured to transmit data enabling bits of data to be transmitted between the measuring device and the other
5 device. The measuring device also includes a signal monitoring circuit and a switch element. The switch element is electrically contacted to a test potential source. The test potential source is in contact with the signal monitoring circuit according to a switch element state. The signal
10 monitoring circuit is also in contact with the device for transmitting data. A method provides for functional monitoring of such a measuring system in a monitoring mode when a test potential is applied.